

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application: Jobling et al.)	Group Art Unit: 1623
)	
Serial No.)	Examiner: Patrick T. LEWIS
)	
Filed: August 1, 2003)	Atty. Docket No. 1770D
)	
For: Starch Obtainable From Modified Plants		

INFORMATION DISCLOSURE STATEMENT

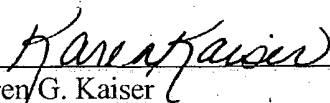
Commissioner for Patents
Washington, D. C. 20231

Sir:

It is respectfully requested that the documents listed on the accompanying form PTO-1449 be considered and made of record. These documents were considered and made of record during the examination of parent application Serial No. 09/719,771. Copies of these documents may be found in the parent application. Applicants will submit additional copies of these documents upon the request of the examiner.

No fee is due as this paper is being filed prior to receipt of a first action on the merits.

Respectfully submitted,



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August 1, 2003

Form PTO-1449
(REV. 7/80)U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No. 1770D

Serial No.

LIST OF REFERENCES CITED BY APPLICANT
(Use several sheets if necessary)

Applicant: Jobling et al.

Filing Date: July 31, 2003

Group

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	AA	6,013,299	01/11/00	Haynes et al.			
	AB						
	AC						
	AD						
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FOREIGN PATENT DOCUMENTS

	AL	CA 2,205,118	05/23/96	Canada			
	AM	EP 0 779 363	06/18/97	Europe			
	AN	EP 0 799 363	05/06/99	Europe			
	AO	DE 43 30 960 (English abstract only)	03/16/95	Germany			
	AP	DE 44 41 408 (English abstract only)	05/15/96	Germany			

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Abel et al., "Cloning and functional analysis of a cDNA encoding a novel 139 kDa starch synthase from potato (<i>Solanum tuberosum</i> L.)", Plant Journal 10(6):981-991, 1996
	AS	Becker et al., "New plant binary vectors with selectable markers located proximal to the left T-DNA border", Plant Molecular Biology 20: 1195-1197, 1992
	AT	Craig et al., "Mutations in the Gene Encoding Starch Synthase II Profoundly Alter Amylopectin Structure I Pea Embryos", Plant Cell 10: 413-426, 1998

EXAMINER

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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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FOREIGN PATENT DOCUMENTS

	AL	WO 94/24292	10/27/94	PCT			
	AM	WO 95/26407	10/05/95	PCT			
	AN	WO 95/35026	12/28/95	PCT			
	AO	WO 96/15248 (English abstract only)	05/23/96	PCT			
	AP	WO 96/34968	11/07/96	PCT			

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Denyer et al. "The isolation and characterization of novel low-amylose mutants of <i>Pisum sativum</i> L.", Plant Cell Environ. 18: 1019-1026, 1995
	AS	Dry et al. "Characterization of cDNAs encoding two isoforms of granule-bound starch synthase which show differential expression in developing storage organs of pea and potato", Plant Journal 2(2): 193-202, 1992
	AT	Edwards et al., "Biochemical and molecular characterization of a novel starch synthase from potato tubers", Plant Journal 8(2): 283-294, 1995

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FOREIGN PATENT DOCUMENTS

	AL	WO 97/20040	06/05/97	PCT			
	AM	WO 97/20936	06/12/97	PCT			
	AN	WO 97/22703	06/26/97	PCT			
	AO	WO 97/44472 (English abstract only)	11/27/97	PCT			
	AP	WO 97/45545	12/04/97	PCT			

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Evans and Haisman, "The Effect of Solutes on the Gelatinization Temperature Range of Potato Starch", <i>Stärke</i> 34(7): 224-231, 1982
	AS	Flipse et al., "The dosage effect of the wildtype GBSS allele is linear for GBSS activity but not for amylose content: absence of amylose has a distinct influence on the physico-chemical properties of starch", <i>Theor. Appl. Genet.</i> 92: 121-127, 1996
	AT	Gao et al., "Characterization of dull1, a Maize Gene Coding for a Novel Starch Synthase", <i>Plant Cell</i> 10, 399-412, 1998

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	AL						
	AM						
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	AP						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR		Hanashiro et al., "A periodic distribution of the chain length of amylopectin as revealed by high-performance anion-exchange chromatography", Carbohydrate Research 283: 151-159, 1996
AS		Harn et al., "Isolation and characterization of the zSSIa and zSSIb starch synthase cDNA clones from maize endosperm", Plant Mol. Biol. 37: 639-649, 1998
AT		Hovenkamp-Hermelink et al., "Isolation of an amylose-free starch mutant of the potato (Solanum tuberosum L.)", Theor. Appl. Genet. 75: 217-221, 1987

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	AL						
	AM						
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	AO						
	AP						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Koßmann et al., "Starch Biosynthesis and Modification of Starch Structure in Transgenic Plants", Macromol. Symp. 12;0 29-38, 1997
AS	Lloyd, James R. et al., "Simultaneous antisense inhibition of two starch-synthase isoforms in potato tubers leads to accumulation of grossly modified amylopectin", Biochem. J. 338: 515-521, 1999
AT	Marshall et al., "Identification of the Major Starch Synthase in the Soluble Fraction of Potato Tubers", Plant Cell 8, 1121-1135, 1996

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	AL						
	AM						
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	AO						
	AP						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Morrison and Laignelet, "An Improved Colorimetric Procedure for Determining Apparent and Total Amylose in Cereal and Other Starches", Journal of Cereal Science 1: 9-20, 1983
AS	Munyikwa et al., "Cassava starch biosynthesis: new avenues for modifying starch quantity and quality", Euphytica 96: 65-75, 1997
AT	Murashige and Skoog, "A Revised Medium for Rapid Growth and Bio Assays with Tobacco Tissue Cultures", Physiol. Plant. 15: 473-497, 1962

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	AL						
	AM						
	AN						
	AO						
	AP						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Ring et al., "The Gelation and Crystallisation of Amylopectin", Carbohydrate Research 162: 277-293, 1987
AS	Shi et al., "Molecular Structure of a Low-Amylopectin Starch and Other High-Amylose Maize Starches", Journal of Cereal Science 27: 289-299, 1998
AT	Shure et al., "Molecular Identification and Isolation of the Waxy Locus in Maize", Cell 35, 225-233, 1983

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	AL						
	AM						
	AN						
	AO						
	AP						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Stute, Rolf, "Hydrothermal Modification of Starches: The Difference between Annealing and Heat/Moisture - Treatment", Stärke 44: 205-214, 1992
AS	Tomlinson et al., "Major differences in isoform composition of starch synthase between leaves and embryos of pea (Pisum sativum L.)", Planta 204: 86-92, 1998
AT	Visser et al., "Expression of a chimaeric granule-bound starch synthase-GUS gene in transgenic potato plants", Plant Molec. Bio. 17: 691-699, 1991

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